

**Disclosure RPS8-2003-0156**

Prepared for and/or by an IBM Attorney - IBM Confidential

Created By Daryl Cromer On 02/09/2003 09:47:43 AM EST

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Required fields are marked with the asterisk (*) and must be filled in to complete the form .

*** Title of disclosure (in English)**

Extend remote inventory to work on non powered client on wireless networks

Summary

Status	Final Decision (File)
Final deadline	
Final deadline reason	
Docket family	RPS9-2003-0194
* Processing location	Raleigh - RPS
* Functional area	(MOBILE) MOBILE
Attorney/Patent professional	Charlie Bustamante/Raleigh/IBM
Business Area Manager/IDT Lead	
Evaluators	Chris Dombrowski/Raleigh/IBM Paul Benson/Raleigh/IBM Dave Challener/US/Lenovo/IDE Scott Dunham/Raleigh/IBM Rick Dayan/Raleigh/IBM Ben Grimes/Raleigh/IBM Howard Locker/US/Lenovo/IDE David Rhoades/Raleigh/IBM Randy Springfield/Raleigh/IBM Eric Kern/Raleigh/IBM Don Keener/Raleigh/IBM Ed Suffern/Raleigh/IBM John H Nicholson/US/Lenovo/IDE Jerry Pearce/US/Lenovo/IDE Jason R Almeida/Raleigh/IBM Daryl Cromer/Raleigh/IBM Brandon Ellison/Raleigh/IBM Ruthie D Lyle/Raleigh/IBM Brian Trumbo/Raleigh/IBM Simon C Chu/China/IBM Rod Waltermann/US/Lenovo/IDE
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* Owning division	PCD
Incentive program	
Lab	
* Technology code	742

Inventors with a Blue Pages entry

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Main Idea for Disclosure RPS8-2003-0156

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Title of disclosure (In English)

[REDACTED] Extend remote inventory to work on non powered client on wireless networks

Main Idea of disclosure

1. Background

[REDACTED]
IBM Patent 6,381,636, Data processing system and method for permitting a server to remotely access a powered-off client computer system's asset information was filed before the mass adaption of wireless LAN's.

[REDACTED] The above patent to add claims on how to do within a wireless LAN infrastructure.

2. Summary of Invention

[REDACTED]
The new claims extend the above patent to cover wireless networks where the client LAN subsystem behavior is significantly different than wired LAN subsystem. For a wired network, the physical layer is constantly powered and associated to the network and the controller (MAC) is powered down. For wireless network, the physical layer is periodically power down and the controller remains powered and both are powered down whenever the system is in low power mode.

3. Description:

As illustrated, the Wireless LAN radio (WLAN) on mobile clients are not always powered on, since saving battery life is critical and it is not possible to keep power to the WLAN. Therefore the above patent does not work with wireless clients.

Our solution is done in the following way:

In a wireless LAN the access point (AP) is always powered on. Clients turn off when not being used and on a time interval turn their radio on and listen for a broadcast from the access point. In this invention we would store the transmit Inventory packet within the access point. This can be done within a simple table within the access point. This table will contain an entree for each client within the access point range. The entree would be created when the client associated with the access point. The AP will always listen to traffic and look for Inventory request packets which could be implemented as an extension on WOL packet which is the MAC address repeated 16 times with a control field indicating send inventory. This control field indicates if someone was requesting the client's inventory information. When the AP sees an Inventory packet then the AP would then check the MAC address to see if it was contained within its table. If yes it would set the inventory field within the table.

Periodical each client wakes up and beacons the access point to see if there is traffic. During this beacon the client will query the AP to see if it had a inventory packet waiting for it. If yes then it would proceed with the same approach as a constantly powered LAN subsystem per the patent above.

PATENTABILITY

Search Report for: Charlie Bustamante

Search Request No: RPS8-2003-0156

Title: Extend remote inventory to work on non powered client on wireless networks

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What features were searched for?

In a wireless LAN the access point is always powered on. Clients turn off when not being used and on a time interval turn their radio on and listen for a broadcast from the access point. This can be done within a simple table within the access point. This table will contain an entrée for each client within the access point range. The entrée would be created when the client associated with the access point. The AP will always listen to traffic and look for inventory request packets which could be implemented as an extension on WOL packet which is the MAC address repeated 16 times with a control field indicating send inventory. This control field indicates if someone was requesting the client's inventory information. When the AP sees an inventory packet then the AP would then check the MAC address to see if it was contained within its table. If yes it would set the inventory field within the table. Periodically each client wakes up and beacons the access point to see if there is traffic. During this beacon the client will query the AP to see if it had a inventory packet waiting for it. If yes than it would proceed with the same approach as a constantly powered LAN subsystem per US Patent 6381636.

Field of Search:

MANUAL

709/211
710/15, 100
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714/39, 31

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